SECOR

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April 24, 2006

Mr. Mark Verhey
Humboldt County Department of Public Health
100 H Street
Eureka, California 95501

RE: **Quarterly Status and Remediation Summary Report – First Quarter 2006**
SECOR Project No.: 77CP.60009.02.1106

Dear Mr. Verhey:

On behalf of ConocoPhillips, SECOR International Incorporated is forwarding the quarterly summary report for the following location:

Service Station	**Location**
Former 76 Service Station No. 01106 LOP # 12698	1693 Central Avenue, McKinleyville, California

If you have questions or comments regarding this quarterly summary report, please do not hesitate to contact me at (916) 861-0400.

Sincerely,
SECOR International Incorporated

Thomas M. Potter
Project Scientist

Attachment: SECOR's *Quarterly Status and Remediation Summary Report – First Quarter 2006*

cc: Mr. Thomas Kosel, ConocoPhillips

QUARTERLY STATUS AND REMEDIATION REPORT
FIRST QUARTER 2006

Former 76 Station No. 01106
LOP #12698
1693 Central Avenue
McKinleyville, California

City/County ID #: McKinleyville
County: Humboldt

SITE DESCRIPTION

The subject site is located on the corner of Central Avenue and Sutter Road in McKinleyville, California. The site operated as retail service station from 1982 until 1999. Currently, a retail drive-up espresso kiosk is located at the site.

PREVIOUS ASSESSMENT

In 1999, Tosco Marketing Company (now ConocoPhillips) removed three 10,000-gallon gasoline underground storage tanks (USTs) and associated piping and dispensers. Results of laboratory analyses of samples collected during the work indicated that hydrocarbons were present in soil and groundwater beneath the site.

In February 2000, at the request of Tosco, Environmental Resolutions Inc. (ERI) performed a soil and groundwater investigation including the installation of four on-site groundwater monitoring wells (MW-1 through MW-4) and one on-site boring. Results of laboratory analyses of soil samples collected during the investigation indicated that hydrocarbons were not present in soil at concentrations at or above laboratory reporting limits. Based on this data, the area of affected soil at the site is delineated. The results of laboratory analyses of groundwater samples indicated that dissolved hydrocarbons were present in groundwater: affected groundwater was not delineated at the site.

In October 2000, ERI installed one on-site and four off-site groundwater monitoring wells (MW-5 through MW-9).

In February 2003, ERI submitted a corrective Action Plan (CAP) recommending the installation of an ozone microsparge system.

In May 2003, sparge wells AS-1 through AS-7 were installed at the site.

In October 2003, a remedial system design utilizing ozone microsparging was prepared.

In January 2004, an ozone injection system was installed at the site by Miller Brooks Environmental, Inc., with SECOR performing operations and maintenance activities. The ozone injection system consists of a panel-mounted KVA C-Sparge™ System designed to produce 4 grams per hour (0.009 pounds per hour) of ozone. The system injects to seven ozone sparge wells (AS-1 through AS-7).

SENSITIVE RECEPTORS

In October 2000, ERI performed an underground utility survey, and performed a door-to-door groundwater receptor survey within a 1,100-foot radius of the site. The door-to-door groundwater receptor survey revealed seven potential groundwater receptors, all of which are water supply wells. Four of these wells were reported as inactive, one well was reported as active, and the status of the remaining two wells is unknown. Detailed well information such as well use, total depth, and perforated screen interval was not available. According to ERI the closest active well to the site is located approximately 1,100 feet southwest (crossgradient) of the site. The door-to-door groundwater receptor survey did not reveal any basements with groundwater sumps, surface water bodies, or other potential groundwater receptors.

MONITORING AND SAMPLING

The site has been monitored and sampled since the first quarter 2000. Between the first Quarter 2000 and the present, monitoring and sampling has been conducted quarterly. Currently, seven wells (MW-1 through MW-3, MW-5 through MW-7, and MW-9) are sampled quarterly. MW-4 and MW-8 are sampled semiannually. Samples are analyzed for total petroleum hydrocarbons as gasoline (TPHg), and benzene, toluene, ethylbenzene, and total xylenes (BTEX). Additionally, samples are analyzed for nitrate, sulfate, carbon dioxide, ferrous iron, methane, alkalinity, manganese, biochemical oxygen demand, and chemical oxygen demand. Results are discussed below and are summarized in TRC's *Quarterly Monitoring Report, January through March 2006* dated March 23, 2006 (Attachment 1).

DISCUSSION

During the First Quarter 2006, depth to groundwater ranged between 4.98 and 7.06 feet below the top of the casing (toc), which was in the range of historical levels. The direction of groundwater flow was toward the northwest at a gradient of 0.01 foot per foot (ft/ft). MW-6 was not sampled this quarter due to being covered with asphalt.

Evaluation of dissolved concentrations through the first quarter 2006 indicates that the highest concentrations of MtBE were detected in off-site well MW-8 at 6.2 µg/L. During first quarter 2006, TPHg and benzene were not detected at or above method contamination limits (MCLs) in any of the wells. These concentrations have reduced significantly from concentrations reported during the fourth quarter 2005. Concentrations of TPHg and MtBE

have fluctuated within historical levels over the past sixteen quarters, but have generally decreased over time. The dissolved plume remains defined by the existing monitoring well network.

The existing ozone sparge (OS) well network appears to be successfully remediating hydrocarbons dissolved in the groundwater downgradient of the former USTs. Remaining MtBE continues to be present in groundwater at MW-8 at concentrations greater than water quality requirements. Reported concentrations in MW-2 increased to 6,000 µg/L TPHg and 1600 µg/L MtBE during third quarter 2005 and then decreased to below MCLs and 0.53 µg/L, respectively, during the first quarter 2006. Environ Strategy Consultant, Inc. (ES) will continue to operate, and Secor will evaluate the effectiveness of the OS system during the second quarter 2006.

CHARACTERIZATION STATUS

Contamination in soil and groundwater has been adequately delineated.

REMEDIAL PERFORMANCE SUMMARY

Ozone Injection Operation

The ozone injection system consists of a wall-mounted KVA C-Sparge™ System, model 5020, designed to produce up to 4 grams (0.009 pounds) per hour of ozone. The system is programmed to inject to each of the seven injection wells for ten minutes, cycling eighteen times per day resulting in 87.5 percent (21 hours/day) operation.

During the first quarter 2006, the ozone injection system was not operational. On September 9, 2005, it was discovered that the business that supplied the remediation system with its power had closed for business and PG&E had shut the power off. ConocoPhillips is in the process of getting dedicated power for the remedial system from PG&E. Cumulatively, the ozone injection system has operated for 5,467 hours and has injected a total of approximately 49.2 pounds of ozone into the subsurface. Operating data for the ozone injection system, operating hours, pressure readings and field data sheets are included in Attachment 2.

Monthly Groundwater Sampling

Previously, monthly groundwater samples were collected from monitoring wells MW-2 and MW-4 and analyzed for TPHg, BTEX, and MtBE. Monthly sampling was discontinued at the request of ConocoPhillips after the July 2005 sampling event. Results of the monthly groundwater sampling events are summarized in Attachment 2. Oxidation-reduction potential (ORP) and dissolved oxygen (DO) measurements were also collected monthly, and are included in Attachment 2. A site plan is included in Attachment 1 and concentration versus time graphs for dissolved TPHg, benzene, and MtBE in monitoring wells MW-2 and MW-4 are provided in Attachment 1, respectively. Certified laboratory analytical reports

and chain-of-custody documentation for the groundwater monitoring events conducted during the current quarter are provided in Attachment 1.

WASTE DISPOSAL

The volume of purged groundwater generated and disposed of during the quarterly groundwater monitoring event is documented in TRC's *Quarterly Monitoring Report, January through March 2006* dated March 23, 2006 (Attachment 1).

RECENT SUBMITTALS/CORRESPONDENCE

Submitted – *Quarterly Status and Remediation Summary Report – Fourth Quarter 2005,* dated January 23, 2006.

THIS QUARTER ACTIVITIES (First Quarter 2006)

1. TRC performed quarterly groundwater monitoring and sampling.
2. Environ Strategy Consultant, Inc. (ES) performed operation and maintenance of the ozone system.
3. SECOR prepared and submitted the fourth quarter 2005 quarterly summary and quarterly remedial performance summary report.

NEXT QUARTER ACTIVITIES (Second Quarter 2006)

1. TRC will conduct quarterly groundwater monitoring and sampling.
2. ES will continue operation and maintenance of the ozone system.
3. SECOR will prepare and submit quarterly summary report and attach ES's quarterly Remedial Performances summary.
4. SECOR will evaluate the effectiveness of the OS system during the second quarter 2006.

LIMITATIONS

This report has been prepared for the exclusive use of ConocoPhillips and its representatives as it pertains to the property located at 1693 Central Avenue, McKinleyville, California. The evaluation of subsurface conditions at the site for the purpose of this investigation is inherently limited due to the number of points of investigation. There are no representations, warranties, or guarantees that the results are representative of the entire site. Data from this report reflects the conditions at locations at a specified time. No other interpretation, representations, warranties, guarantees, express or implied, are included or intended in the report findings. SECOR makes no warranties or guarantees for the groundwater monitoring report (Attachment 1) prepared by TRC or for the vapor extraction system O&M report prepared by ES (Attachment 2).

Sincerely,
SECOR International Incorporated

Ed Simonis, P.G.
Senior Geologist

EDWARD (ED) K. SIMONIS
No. 4422

Ben McKenna
Project Geologist

Attachments:

Attachment 1 – TRC's *Quarterly Monitoring Report – January through March 2006*, dated March 23, 2006
Attachment 2 – Environ Strategy's *First Quarter 2006 Ozone Injection System O&M Report*

ATTACHMENT 1
TRC'S *QUARTERLY MONITORING REPORT JANUARY THROUGH MARCH 2006*

First Quarter 2006 Quarterly Summary and
Remediation Status Report
Former 76 Station No. 1106
1693 Central Avenue
McKinleyville, California
SECOR Project No.: 77CP.60009.02.1106

SEE TRC

REPORT:

(Uploaded Separately)

ATTACHMENT 2
ENVIRON STRATEGY'S FIRST QUARTER 2006 OZONE INJECTION SYSTEM O&M REPORT

First Quarter 2006 Quarterly Summary and
Remediation Status Report
Former 76 Station No. 1106
1693 Central Avenue
McKinleyville, California
SECOR Project No.: 77CP.60009.02.1106

environ strategy consultants, inc.

30 Hughes, Suite 209
Irvine, California 92618
tel 949.581.3222
fax 949.581.3207

April 15, 2006

Project No. 328-A

Mr. Thomas Potter
Project Scientist
SECOR International, Inc.
3017 Kilgore Road, Suite 100
Rancho Cordova, CA 95670

First Quarter 2006
Ozone Injection System O&M Report
Former 76 Service Station No. 1106
1693 Central Avenue
McKinleyville, California

Dear Mr. Potter:

Environ Strategy Consultants, Inc. is pleased to submit this ozone injection system operation and maintenance (O&M) report for former 76 Service Station No. 1106, located at 1693 Central Avenue, McKinleyville, California. An ozone injection system was started on January 7, 2004 to remediate hydrocarbon-impacted groundwater.

Type of Remediation System:	Ozone Injection System
Operation Data During: Reporting Period: Jan. 1, 2006 – Mar. 31, 2006	Operated 0 days during the period Hours of Operation: 0
System Operation Data Since Startup: January 7, 2004	Total Hours of Operation: 5,467
Note: System did not operate during the first quarter of 2006 due to continuing efforts with PG&E to restore power to the ozone injection system.	

Environ Strategy appreciates the opportunity to be of service. If you have any questions or require additional information regarding this report, please do not hesitate to call us at (949) 581-3222.

Respectfully submitted,

Sonny Nguyen
Project Assistant

RECEIVED
APR 14 2006
BY:----------

Jinghui Niu, P.E.
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
JINGHUI NIU
C 051072
Exp. 9/30/07
CIVIL
STATE OF CALIFORNIA

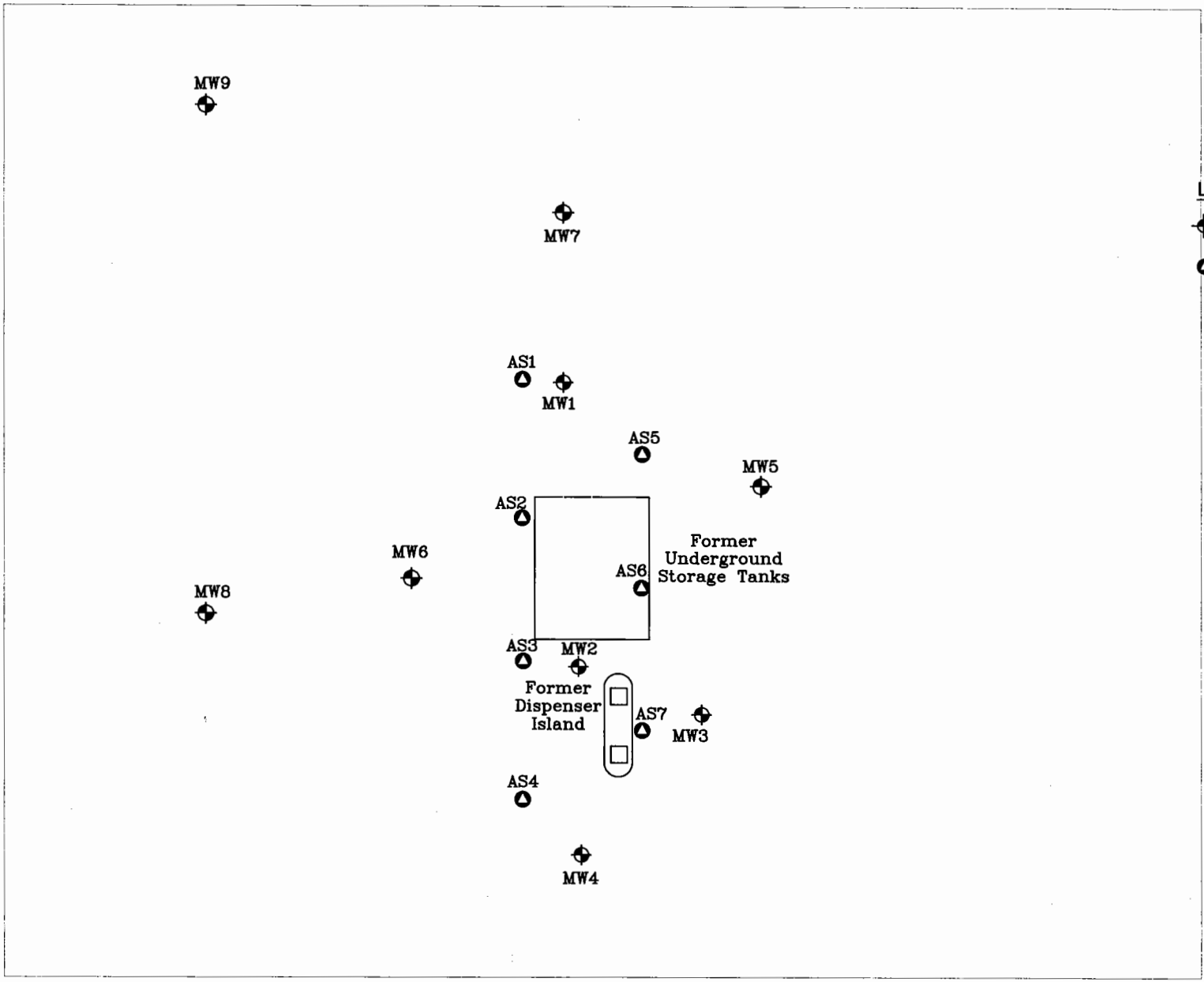
Attachments: Figure - Site Plan

Table 1 – Ozone Injection System Operating Data
Table 2 – Ozone Injection System Groundwater Monitoring Data

Graph 1 – MW-2 Chart
Graph 2 – MW-4 Chart

cc: Thomas Kosel, ConocoPhillips Company (electronic copy)

Figure



LEGEND:

MW1 GROUNDWATER MONITORING WELL

AS5 AIR SPARGE WELL

N

0 60 50

SCALE IN FEET

REFERENCE: THIS FIGURE IS BASED ON A MAP PROVIDED BY ERI INC.

SECOR
3017 KILGORE ROAD, SUITE 100
RANCHO CORDOVA, CALIFORNIA
PHONE: (916) 861-0400/861-0430 (FAX)

FOR:
FORMER 76 SERVICE
(CIRCLE K) STORE NO. 01106
1693 CENTRAL AVENUE
McKINLEYVILLE, CALIFORNIA

SITE PLAN

FIGURE: 1

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
77CP.60009.02	DWR	AG	RB	07/19/04

Table

Table 1
Ozone Injection System Operating Data
Former Circle K Store No. 01106
1693 Central Avenue, McKinleyville, California

Date	Notes	OZONE SPARGE SYSTEM					AS-1	AS-2	AS-3	AS-4	AS-5	AS-6	AS-7
		System Status (On/Off)		Hourmeter	Period Online	Cumulative Online	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure
		Arrival	Departure	Reading	Factor	Factor	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
1/7/2004		Off	Off	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
1/12/2004		Off	On	67	NA	NA	36	36	33	35	34	32	36
1/23/2004		On	On	207	0.76	0.76	37	35	32	34	34	32	31
1/30/2004	a	Off	On	233.06	0.22	0.55	39	37	36	36	35	33	32
2/4/2004		On	On	316.00	0.99	0.64	37	34	33	35	35	33	31
2/27/2004	b	Off	On	409.24	0.24	0.44	--	--	--	--	--	--	--
3/25/2004	b	Off	On	754.83	0.76	0.56	--	--	--	--	--	--	--
4/28/2004	b	On	On	1,247.43	0.86	0.66	--	--	--	--	--	--	--
6/1/2004	c	On	On	1,812.92	0.99	0.74	--	--	--	--	--	--	--
6/23/2004	a,b	Off	On	1,963.13	0.41	0.69	--	--	--	--	--	--	--
7/22/2004	d	On	On	2,446.77	0.99	0.74	35	34	30	34	32	31	29
8/25/2004		On	On	2,647.00	0.35	0.68	33	32	29	33	32	29	28
9/22/2004	e	Off	On	3,104.00	0.95	0.71	37	34	32	34	33	32	29
10/20/2004	a	Off	On	3,464.57	0.77	0.72	38	34	31	35	36	32	29
11/17/2004		On	On	3,933.81	1.02	0.74	38	37	33	36	35	33	31
12/16/2004	a	Off	On	4,256.42	0.66	0.74	37	38	32	36	35	32	30
1/12/2005	f	Off	Off	4,509.00	0.56	0.72	--	--	--	--	--	--	--
2/3/2005	f,g	Off	Off	--	--	--	--	--	--	--	--	--	--
2/4/2005	h, i	Off	Off	--	--	--	--	--	--	--	--	--	--
2/18/2005	j	Off	On	4,509.00	--	--	--	--	--	--	--	--	--
2/21/2005		On	On	4,598.00	0.13	0.53	36	34	32	34	32	31	30
3/21/2005	k	Off	On	5,142.91	0.93	0.56	40	35	34	36	35	33	32
4/17/2005	l	Off	On	5,191.17	0.09	0.53	25	24	20	22	21	24	20
5/5/2005	l,m	Off	On	--	--	--	--	--	--	--	--	--	--
5/16/2005	l,m	Off	Off	5,203.26	0.02	0.50	32	30	30	33	32	30	29
5/20/2005	l,m,n	Off	On	--	--	--	--	--	--	--	--	--	--
6/17/2005	l,m	Off	On	--	--	--	36	35	32	33	33	30	30
7/15/2005	l,m	Off	On	5,303.00	0.08	0.45	37	36	32	36	32	30	29
8/11/2005	o,p	Off	On	5,311.01	0.01	0.43	--	--	--	--	--	--	--
8/18/2005		On	On	5,467.00	1.00	0.44	35	33	32	35	34	32	30
9/9/2005	q	Off	Off	--	--	--	--	--	--	--	--	--	--
						Sparge time per cycle (min)	10	10	10	10	10	10	10

Reporting Period: First Quarter 2006 (1/01/2006 to 3/31/2006)
Total Hours Operational: 5,467
Total Pounds Ozone Injected: 49.2
Period Hours Operational: 00
Period Percent Operational: 0%
Period Pounds Ozone Injected: 0.0

Definitions:

psi	Pounds per square inch
--	Data not available
NA	Not applicable

Notes:

	Cycle runs 18 times a day for a total of 1,260 minutes per day, or 87.5% utilization.
a	System down due to tripped ozone sensor.
b	Bad pressure gauge.
c	May system check visit.
d	Ashcroft Pressure Gage installed in sparge cabinet.
e	System down due to bad GFI switch. Replaced and restarted.
f	System down due to faulty wire.
g	Site visit to repair faulty wire.
h	Site visit to repair leaks at compressor outlet, SP-5 solenoid, SP-6 solenoid, and SP-7 solenoid and to re-program system.
i	System reprogrammed to run 10 min. cycles for each well with 18 cycles a day for a total of 1260 min. a day .
j	System restarted.
k	Piston and cylinder replaced and system restarted.
l	System down due to tripped breaker. System restarted.
m	SHN field data.
n	Plugged #8 solenoid with threaded fitting. Check for leaks, none, left system on.
o	Site visit for repairs only. No readings taken.
p	Installed new compressor, replaced 16 amp breaker with time delay fuse, replaced primary power wires.
q	PG&E turned off power to the business the system get it's power from.

Table 2
Ozone Injection System Groundwater Monitoring Data
Former Circle K Store No. 01106
1693 Central Avenue, McKinleyville, California

		Monitoring Well: MW-2								Monitoring Well: MW-4							
Date	Notes	ORP (mV)	DO (mg/l)	TPHg (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (total) (µg/l)	MtBE (µg/l)	ORP (mV)	DO (mg/l)	TPHg (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (total) (µg/l)	MtBE (µg/l)
4/28/2004		228	NS	**180**	**38**	**14**	**2.1**	**16**	**57**	NS	NS	NS	NS	NS	NS	NS	NS
5/26/2004		181	NS	**640**	**130**	**50**	**9.1**	**54**	**180**	154	NS	<50	<0.50	<0.50	<0.50	<1.0	<0.50
6/23/2004		180	NS	**1,000**	**45**	**12**	**5.2**	**11**	**860**	133	NS	<50	<0.50	<0.50	<0.50	<1.0	<0.50
7/21/2004		205	4.33	<500	<5.0	<5.0	<5.0	<10	**560**	232	2.94	<50	<0.50	<0.50	<0.50	<1.0	<0.50
8/25/2004	a	179	NS	**450**	**3.5**	<2.5	<2.5	<5.0	**590**	202	NS	<50	<0.50	<0.50	<0.50	<1.0	<0.50
9/22/2004	a	163	4.50	**120**	<0.50	<0.50	<0.50	<1.0	**160**	180	2.75	<50	<0.50	<0.50	<0.50	<1.0	<0.50
10/20/2004	b	126	0.56	**73**	<0.50	<0.50	<0.50	<1.0	**82**	180	1.98	<50	<0.50	<0.50	<0.50	<1.0	<0.50
11/17/2004		62	5.87	<50	<0.50	<0.50	<0.50	<1.0	**28**	119	1.93	<50	<0.50	<0.50	<0.50	<1.0	**5.1**
12/16/2004		152	2.36	<100	<1.0	<1.0	<1.0	<2.0	**290**	173	1.93	<50	<0.50	<0.50	<0.50	<1.0	<0.50
1/12/2005		151	6.36	**150**	**3.6**	**3.1**	**1.8**	**5.1**	**58**	160	2.17	<50	<0.50	<0.50	<0.50	<1.0	<0.50
2/21/2005		90	3.80	**880**	**220**	**88**	**11**	**100**	**460**	99	2.97	<50	<0.50	<0.50	<0.50	<1.0	<0.50
3/21/2005		46	5.16	**500**	**31**	**6.9**	<0.50	**14**	**680**	-15	4.08	<50	<0.50	<0.50	<0.50	<1.0	<0.50
4/17/2005	d	60	6.70	**390**	**88**	**16**	**2.3**	**24**	**80**	13	5.34	<50	<0.50	<0.50	<0.50	<1.0	<0.50
5/16/2005		143	5.91	**4,100**	**830**	**140**	**36**	**260**	**1,000**	135	4.90	<50	<0.50	<0.50	<0.50	<1.0	<0.50
6/17/2005		239	2.81	**13,000**	**1,600**	**1,200**	**250**	**1,100**	**1,800**	244	4.56	<50	<0.50	<0.50	<0.50	<1.0	<0.50
7/15/2005	e	212	3.62	**1,100**	**170**	**170**	**23**	**140**	**110**	206	4.65	<50	<0.50	<0.50	<0.50	<1.0	<0.50

Definitions:

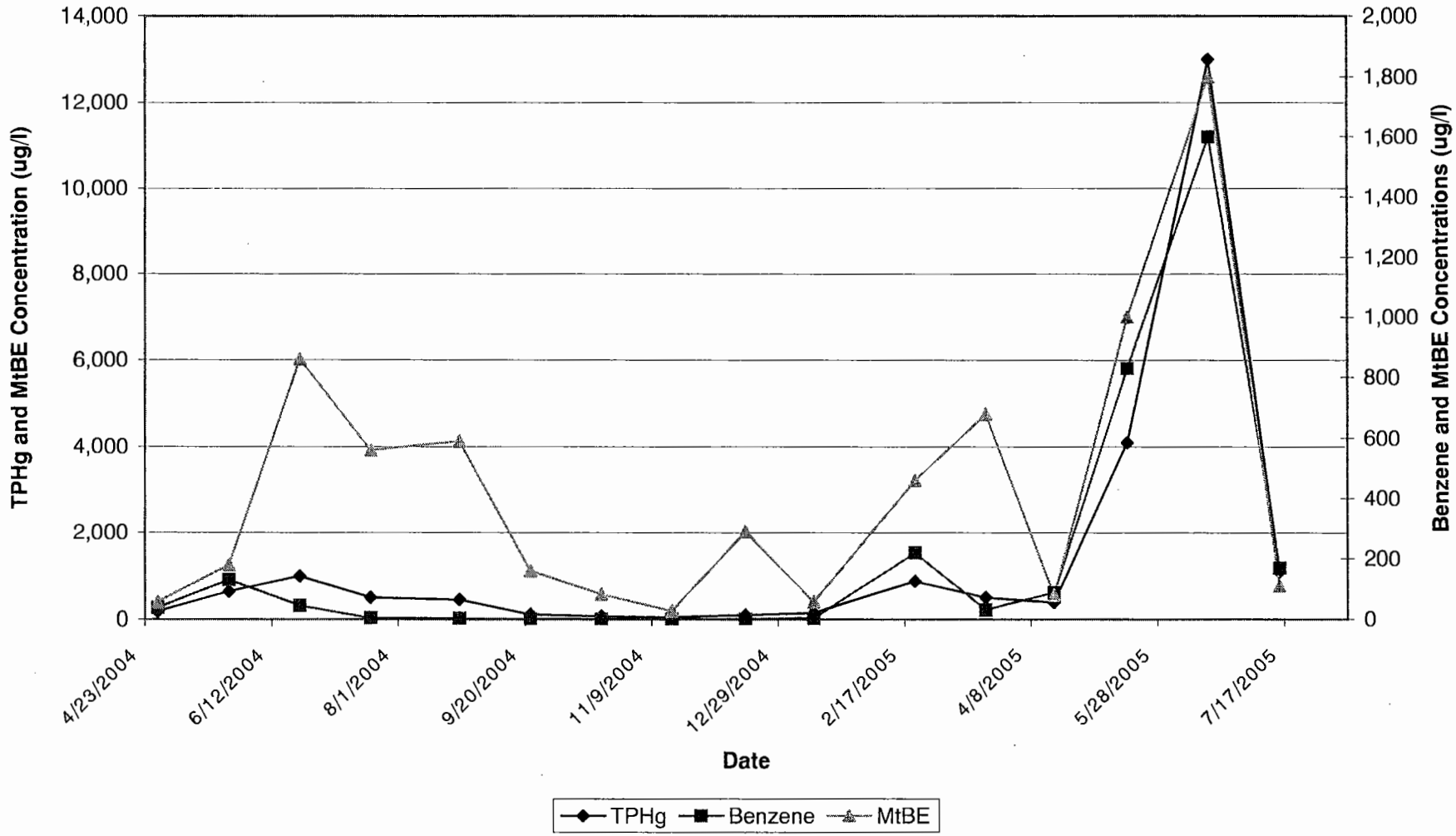
TPHg	Total petroleum hydrocarbons as gasoline
MtBE	Methyl tert-butyl ether
ug/l	Micrograms per liter
mg/l	Milligrams per liter
mV	Millivolts
NS	Not Sampled

Notes:

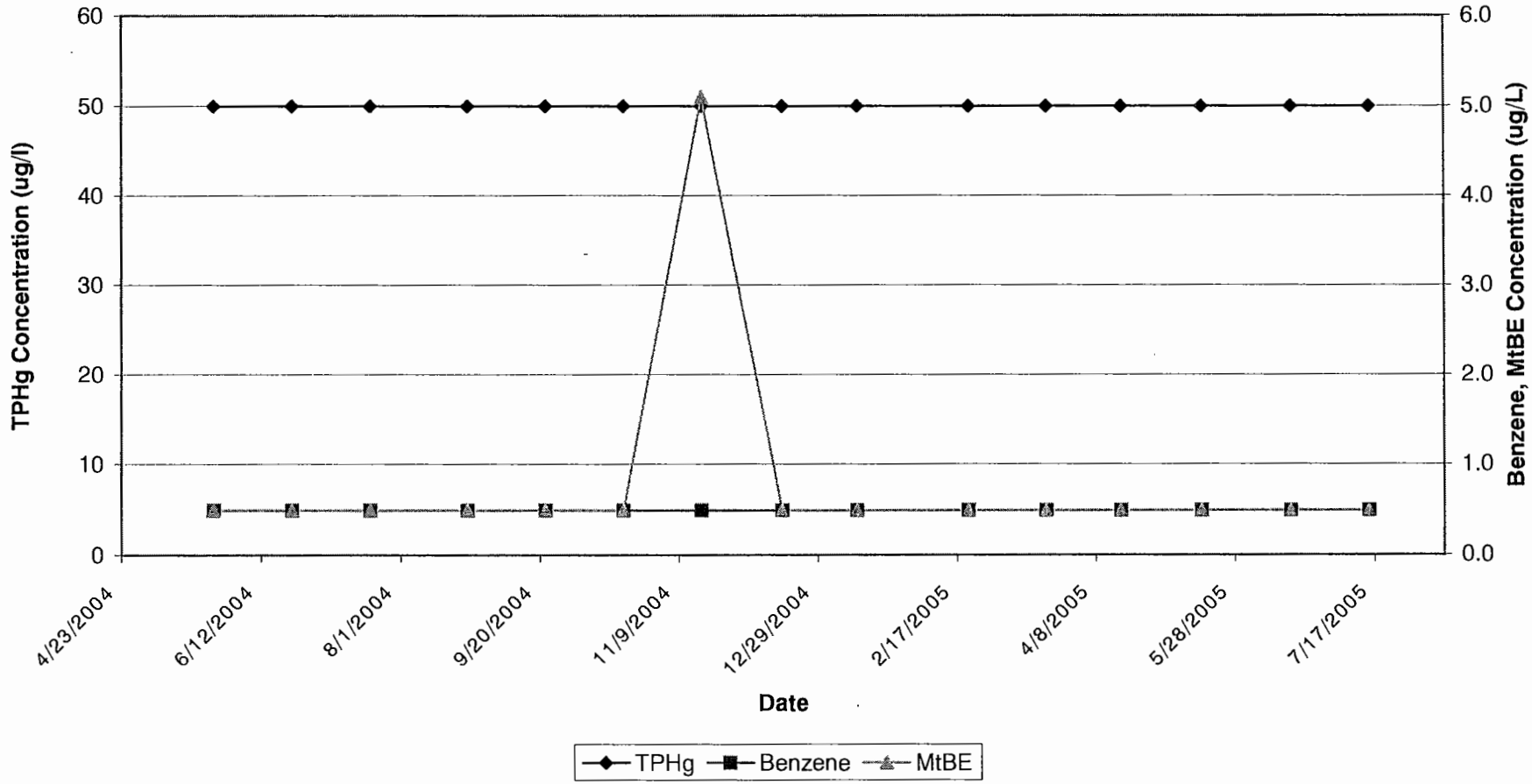
a	MW-2 Sample contains discrete peak in gasoline range.
b	MW-2 TPHg concentration reported reflects individual or discrete unidentified peaks not matching a typical fuel pattern.
c	Data not available at time of reporting.
d	MW-4: MS/MSD spike recoveries were above acceptance limits.
e	Monthly sampling discontinued at the request of CoP.

Graph

Graph 1
MW-2 TPHg, Benzene, and MtBE Groundwater Concentrations
Former Circle K Store No. 01106
1693 Central Avenue, McKinleyville, California



Graph 2
MW-4 TPHg, Benzene, and MtBE Groundwater Concentrations
Former Circle K Store No. 01106
1693 Central Avenue, McKinleyville, California



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